



# California Natural Gas Vehicle Coalition

Michael L. Eaves
President

March 16, 2006

California Energy Commission Dockets Unit Attn: Docket No. 06-BAP-1 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512

Subject: Docket 06-BAP-1 -- Bioenergy Action Plan

The California Natural Gas Vehicle Coalition (Coalition) appreciates this opportunity to provide additional comments on the Bioenergy Report. In a way, the subject and timing of the Bioenergy Report is a concern to the alternative fuels industry, including the natural gas vehicle industry, because on the transportation fuels side of the equation, the report singles out biofuels as a strategic option for California without including the other alternative fuel options for the future. It also follows by a year, an extensive CalEPA report on the hydrogen highway and gives the illusion that the state has no real transportation fuel policy beyond supporting the fuel of the day. This is unfortunate since the CEC has indicated on a number of occasions that a poly-fuel economy is where the state should be going.

The CEC should be commended for its effort to organize the interagency task group and investigate the bioenergy industry potential for California and produce the DRAFT Bioenergy Report. The task group has accomplished a great deal since August 2005. The task group has done a major service to the industry by outlining issues such as water, environment, capital requirements, etc. that may impact the industry. The Bioenergy Report restrains itself from any rush to judgment on whether any of the issues identified with implementation and commercialization are showstoppers. The Coalition thinks that this process of getting all potential opportunities out on the table and without casting judgment on economic viability is a refreshing departure from previous CEC practices.

### Template for Analyzing other Alternative Fuels:

The Coalition strongly recommends that the CEC use the analysis and process for the Bioenergy Report as a template for the analysis of other alternative fuels that are required by AB 1007 legislation to be completed by 2007. All alternative fuels differ from one another but all have issues regarding capital, regulatory, market, and technical issues that have to be resolved to achieve sustainability. The Bioenergy Report tries to capture all the issues for the bioenergy industry without trying to impose upon them a probability of success of resolving all issues. Policy makers need to be informed about all potential alternatives. The Bioenergy Report does address this need.

This is why the Coalition believes this could be a viable template for the analyses of other alternative fuels. The Coalition strongly supports getting all the issues on the table for all alternative fuels <u>before</u> subjecting the options to rigorous economic analysis. In the past, economic analyses done by the Commission have prematurely taken some options off the table severely limiting the debate on options that could/should be pursued by California. While economic analyses are important, it is also important to understand that public policy initiatives and public will/can change the equation. For this reason, we support the Bioenergy Report and the effort to capture all the essential issues first.

An example of how this same template can be applied to other alternative fuel options is looking at a comparison of bioenergy to alcohol versus natural gas for vehicles. In the report, the cost of developing biomass conversion plants to produce ethanol is in the billions of dollars. It even indicates that financial support is needed to make these plants possible – as well as develop the infrastructure to deliver E85 fuel. In the case of natural gas for vehicles, there are no production costs as there are in alcohol plants, but there are capital costs associated with infrastructure and vehicles that have to be addressed. A policy framework that says that some degree of financial support is needed to get the ethanol market off the ground can be equally applied to natural gas for vehicles – or for that matter any other alternative fuel.

There are water and land issues associated with crops for fuel, but there are no water and land issues associated with natural gas for vehicles. There are environmental issues to consider for ethanol use in vehicles but natural gas does not have these same environmental issues (and in fact has been setting the standards for over 10 years in low emissions). The Coalition encourages the CEC to use the template that has come out of the interagency task group to use as an overlay for all other fuels. In this way, there will be less likelihood of missing key issues that could impact state policies to aggressively pursue alternative fuel options.

#### Omissions in the Report -- Biomethane:

There is one major omission in the Bioenergy Report that should be corrected before the report goes forward to the governor. In the discussion of technologies and market potential, there is no discussion of biomass to biogas/biomethane and the potential uses for that product. The report assumes that biomass material has to be either consumed as solid fuel in power generation of cogeneration applications or converted to liquid fuels that are compatible with conventional gasoline and diesel fuels. There is another option for biomass — an option that is gaining support in many other areas of the world — and that is converting biomass to biogas/biomethane and using the methane to either complement existing supplies of natural gas or using that biomethane directly in dedicated natural gas vehicles.

Biomethane as a means to augment existing supplies of natural gas has several advantages. The biomethane when cleaned to pipeline specifications can be injected into the extensive natural gas distribution system in California and used anywhere. If this option were pursued for California, the issues of emissions from biomass power generation plants could be overcome since the biomethane would be consumed in conventional generation plants that utilize low emission technologies. Efficiency problems with biomass generation plants would be avoided since the natural gas could be consumed in the most efficient natural gas generating plants.

## Infrastructure for Biofuels as well as other Alternative Fuels:

The report also fails to enumerate on the many issues and costs associated with potential distribution and marketing of ethanol and/or biodiesel fuels. Many envision that alternative fuels will be introduced through the traditional petroleum infrastructure with the assistance and cooperation of the oil industry. This includes blended fuels such as E10, E85, B20, B100, etc. This proposed marketing and distribution approach would have alternative fuels take advantage of approximately 9,000 petroleum retail stations in California and over 160,000 stations nationwide.

In several recent exchanges with the Secretary of the Department of Energy and several State Senators from the Midwest, oil companies have indicated that E85 is not economically viable now and thus the oil companies had little of no interest in installing E85 pumps in their petroleum stations. The governor of Illinois complained to senators that even though the number of E58 stations had grown in recent years from 20 stations in his state to over 100 stations — only 3 of those stations were at traditional oil company stations. Oil companies are most interested in pursuing non-traditional hydrocarbon resources first before

pursuing alternative fuels. Given the elimination of the oxygenate content for gasoline, the ethanol industry may be back to square one in getting ethanol into the market. Oil companies have also stated in communications to government officials that if the ethanol industry wants to develop E85 as a fuel, that perhaps the ethanol industry needs to install their own E85 stations to obtain the maximum value out of their fuel. For an industry that has a hard time coming up with capital for building ethanol plants, pursuing a plan to develop their own infrastructure would be an additional obstacle to overcome. The oil industry can push for this concept as a way to minimize competition with their existing gasoline and diesel products. The Bioenergy Report needs to capture the fact that infrastructure and marketing are a significant issue that will impact commercialization. Building infrastructure without the full cooperation of the oil industry could be as expensive a proposition as developing the biomass conversion facilities.

#### Goals, Targets, and Objectives versus Mandates:

The Bioenergy Report implies that goals, targets, and objectives for the state comprise a comprehensive energy policy framework for the state. Many at the workshop testified that the state shouldn't resort to mandates as a framework for energy policy. The problem with this approach is that goals, targets, and objectives can be as fleeting as the next election. Without quantifying these goals, targets and objectives in state laws, giving state agencies the responsibility and authority to develop and administer programs to achieve long-term goals, and holding agencies accountable for results – the probability of achieving the intended results over time is slim. There will certainly be initial progress toward achieving these goals, targets, and objectives – but the reality is that a sustained long-term effort is not likely. Even when we have laws on the books like the federal 1992 Energy Policy Act to increase penetration of alternative fuel and displace petroleum – we have seen that even these laws can be defeated by apathy at both the federal and state level. California needs its own Energy Policy Act and the will to make the long-term objectives a reality.

# **Shifting Policies:**

The report notes that the bioenergy industry "has been declining since the early 1990s". This report now elevates this industry to a major strategic energy policy issue over other options. It has only been a couple of years now since the Renewable Portfolio Standard (RPS) was developed. In the RPS debate, bioenergy never received the attention that the Bioenergy Report places on the value of the industry. In fact lower incentives under the RPS reflect that many other types of renewables are more desirable and cost effective than bioenergy options. One has to question why we keep jumping from one solution to another over short timeframes. Will this issue still have legs 5, 10, 15 or 20 years from now? The report does conclude that the state needs to aggressively pursue bioenergy options. Maximizing the benefits of this industry in California will require a long-term focus of support – something noticeably lacking in state energy policy to date.

# Recommendations to the Governor:

The Coalition recognizes that the governor requested this specific report on the potential of bioenergy. The Coalition strongly suggests that this report go forward to the governor with a recommendation that the same evaluation process used for bioenergy be used for all alternative fuels being analyzed under the AB 1007 process. The report should state in the executive summary and conclusions that a complete characterization of the benefits of all alternative fuel options will be available by December 2006 (or June 2006) and that the bioenergy report along with the AB 1007 report should provide the governor and legislature with a suite of options around which California can develop long-term transportation energy policy for the state. A statement such as this goes a long way to alleviate concerns that the governor consider bioenergy as the only option for the state's consideration at this time.

The Coalition believes that natural gas vehicles are a near- and long-term option for California. We look forward to working with the CEC this year to make sure that all the options far California are reflected in the upcoming AB 1007 Report.

If you have any questions regarding these comments, you can call me at 562/697-9646 to discuss. Once again, thanks for the opportunity to submit further comments on this important issue.

Sincerely,

Michael L. Eaves

President, California Natural Gas Vehicle Coalition

cc: Commissioner James Boyd

Susan Brown